



Chicago Flu Update



City of Chicago
Rahm Emanuel, Mayor

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Chicago Department of Public Health
Julie Morita, MD, Acting Commissioner

What is the risk?

Currently, the risk of influenza infection is high, but continues to decrease. During the later months of the influenza season, influenza B has accounted for 50% or higher of the total positive specimens tested for influenza per week. Therefore, influenza B activity may increase in the coming weeks. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. It is not too late to give or get an influenza vaccine. Chicagoans should ask their healthcare provider or pharmacist about vaccine availability. For those without a healthcare provider or whose healthcare providers do not have the influenza vaccine, a list of [City of Chicago Fast-Track Immunization Clinics](#)¹ is available on the City website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org.

Are severe cases of influenza occurring?

The Illinois Department of Public Health (IDPH) has issued [influenza testing and reporting guidelines](#)².

Suspected novel and variant influenza, pediatric influenza-associated deaths, influenza-associated ICU hospitalizations and outbreaks of influenza-like illness in a congregate setting should all be reported to CDPH via [INEDSS](#)³.

For the week of January 25-31, 2015, two influenza-associated ICU hospitalizations were reported; one was positive for influenza A (H1N1) and 1 was positive for influenza B.

Since September 28, 2014, 215 influenza-associated ICU hospitalizations have been reported (**Figure 1**). Among the total ICU hospitalizations reported, 207 were positive for influenza A (108 H3N2, 1 H1N1, and 98 unknown subtype [subtyping not attempted or not all subtypes tested]) and 8 were positive for influenza B. One-hundred (47%) were non-Hispanic Black, 109 (51%) were female, and 131 (61%) were 50 years of age or older (median age of 60 years with a range of 1 month -101 years). Sixty-eight (32%) had reported lung disease (including asthma) and 46 (21%) required ventilator support. Seventeen deaths have been reported among ICU hospitalizations.

Although the total number of influenza-associated ICU hospitalizations reported so far this season is higher than the number reported during the same time period last season (150 cases), influenza seasons with H3N2 strains predominating are associated with more hospitalizations and deaths, particularly among senior citizens and young children.

How much influenza-like illness is occurring?

CDPH receives data from over 60 surveillance sites across Chicago, which report the total number of patient visits seen weekly, and of those visits, the number with influenza-like illness (ILI) (i.e., fever of 100°F or greater, with cough or sore throat). All hospitals in Chicago that provide emergent care are required to report on a weekly basis the total number of emergency department visits, and of those visits, the number with ILI. For the week of January 25-31, 2015 (week 4), with 14 hospitals reporting, 4.7% of emergency department visits were due to ILI (**Figure 2**).

Figure 1. Number of influenza-associated intensive care unit hospitalizations reported for Chicago residents, for current season (2014-2015) and previous season (2013-2014), October-May.

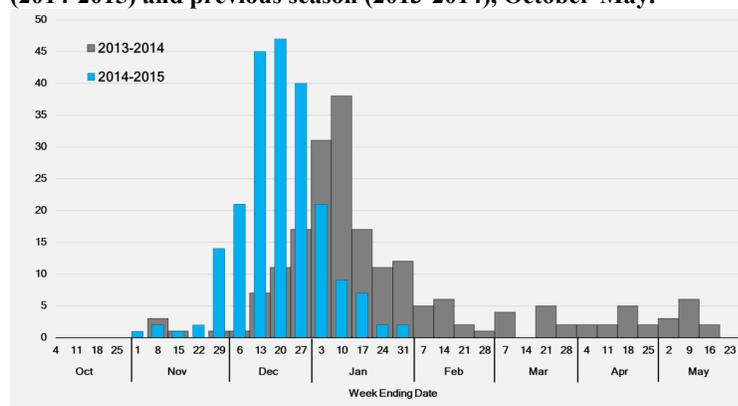
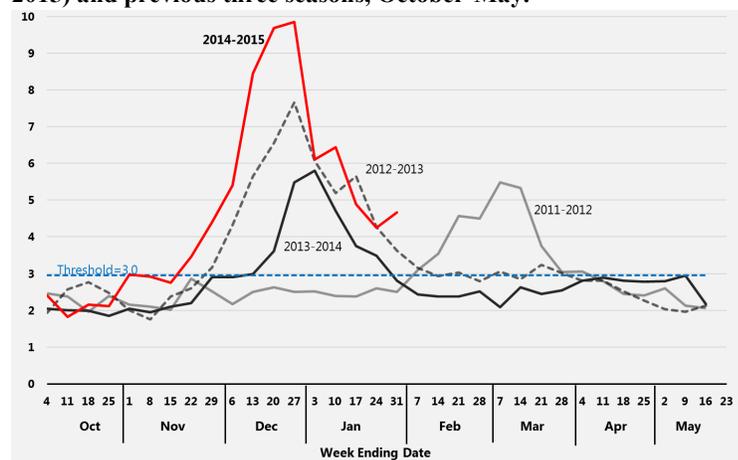


Figure 2. Percent of emergency department visits attributed to influenza-like illness based on manual reporting as determined by individual hospitals, Chicago, by week, for the current season (2014-2015) and previous three seasons, October-May.



¹http://www.cityofchicago.org/city/en/depts/cdp/supp_info/clinical_health/immunizations_walk-in-clinics.html; ²http://www.idph.state.il.us/flu/OHPLabs-Influenza_annual_Testing_and_Reporting_Memo_01_10-2-2014.pdf; ³<https://dph.partner.illinois.gov/>

ESSENCE is an electronic syndromic surveillance system that utilizes emergency department chief complaint data submitted daily by participating Chicago hospitals. ILI activity is determined solely based on the patient's chief complaint and does not take into account the entire medical record, as the ILI activity reported in Figure 2 does. Currently, 10 Chicago hospitals submit data to ESSENCE. For the week of January 25-31, 2015, 2.0% of emergency department visits were due to ILI (Figure 3).

Several outpatient clinics and two large outpatient clinic networks located in Chicago participate in CDC's Influenza-like Illness Surveillance Network (ILINet) by reporting on the number of patients with ILI seen weekly. From January 25-31, 2015 with 23 facilities reporting, 5.6% of visits were due to influenza-like illness (Figure 4).

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza subtyping. For the week of January 25-31, 2015, with 6 laboratories reporting, 26 of the 571 (4.6%) specimens tested for influenza were positive. Among this week's positive specimens, 10 were typed as influenza A (8 H3N2 and 2 H1N1) and 16 were typed as influenza B (Figure 5).

Since September 28, 2014, 1,851 of 10,871 (17%) specimens tested for influenza have been positive; 1,771 typed as influenza A (4 H1N1, 1,457 H3N2 and 310 unknown subtype) and 80 were typed as influenza B.

Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](#)⁴ report provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to [Illinois](#)⁵ and [Suburban Cook County](#)⁶ are also available online. Current and archived issues of the *Chicago Flu Update* can be found on the CDPH website section [Current Flu Situation in Chicago](#)⁷. In 2013, the Metropolitan Chicago Healthcare Council (MCHC) and CDPH released "[Stop the Spread: A Health Care Guide to Influenza Preparedness](#)"⁸. This report provides an overview of influenza, its impact on public health and how hospitals can prepare for, mitigate the impact of and respond to influenza infections and outbreaks.

Figure 3. Percent of **emergency department** visits attributed to influenza-like illness based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current season (2014-2015) and the previous three seasons, October-May.

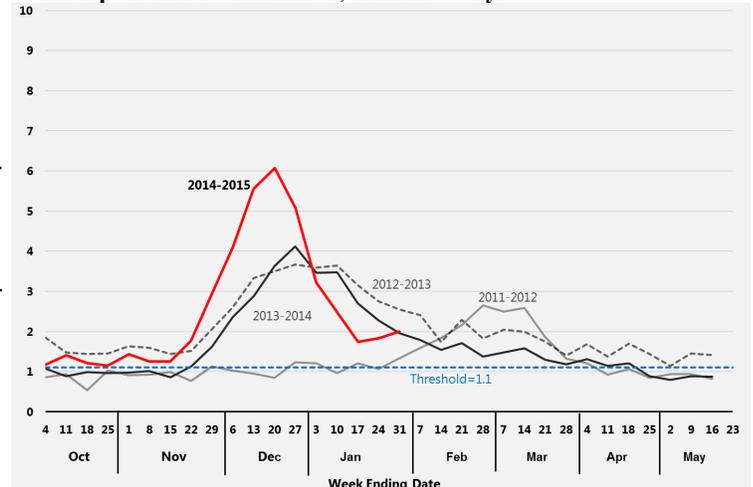


Figure 4. Percent of medically attended **outpatient** visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2014-2015) and the previous three seasons, October-May.

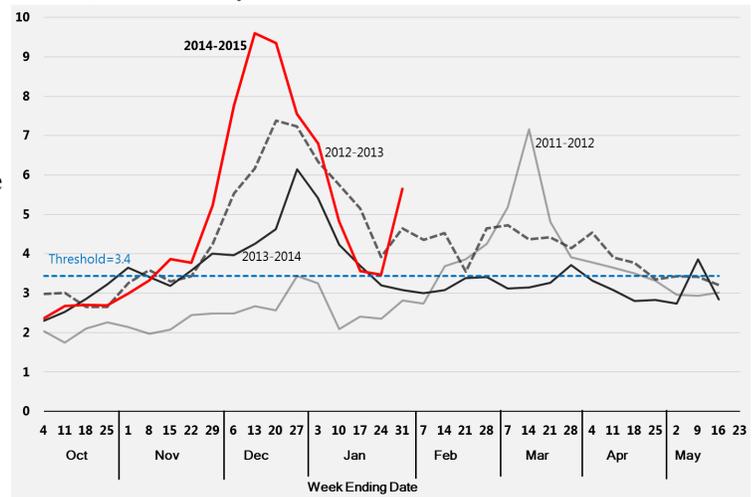
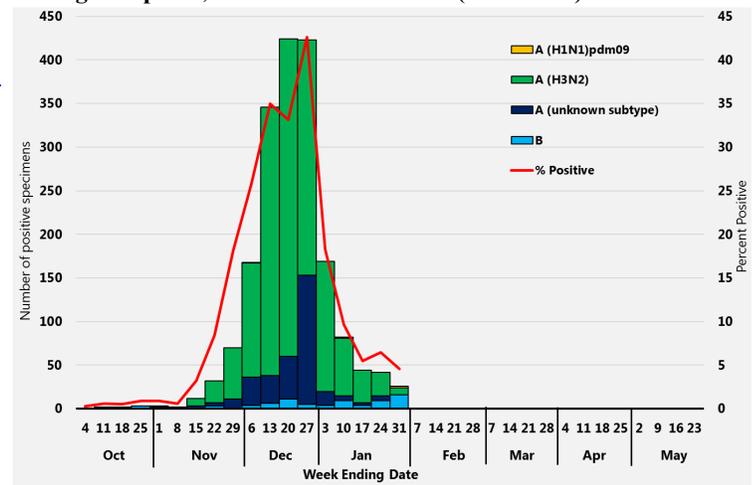


Figure 5. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2014-2015).



⁴<http://www.cdc.gov/flu/weekly/index.htm>; ⁵<http://www.idph.state.il.us/flu/surveillance.htm>; ⁶<http://www.cookcountypublichealth.org/data-reports#influenza>; ⁷http://www.cityofchicago.org/city/en/depts/cdph/supp_info/influenza/current_flu_situationinchicago2011.html; ⁸https://www.mchc.com/wp-content/uploads/2014/11/MCHC_Influenza_2013.pdf